

CERTIFICATE OF ANALYSIS – TECHNICAL DATA SHEET

Product name TCC, Human, clone aE11

Catalog number HM2167-100UG

Lot number

Expiry date

Volume 1 ml

Amount 100 µg

Formulation 0.2 µm filtered in PBS+0.1%BSA

Concentration 100 µg/ml

Host Species Mouse IgG2a

Conjugate None

Endotoxin <24 EU/mg

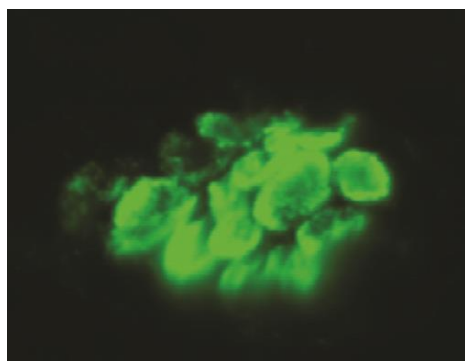
Purification Protein G

Storage 4°C

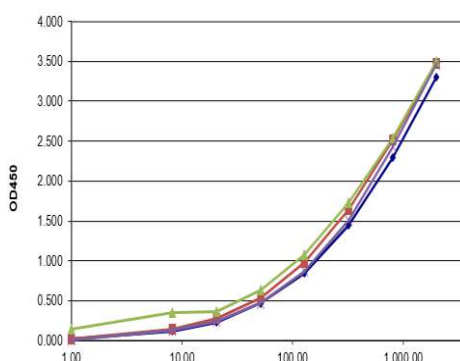
Application notes

	IHC-F	IHC-P	IF	FC	FS	IA	IP	W
Reference #	6	4	2,4	5	3,5	1,2		2
Yes	•	•	•	•	•	•		
No								•
N.D.							•	

N.D.= Not Determined; IHC = Immuno histochemistry; F = Frozen sections; P = Paraffin sections; IF = Immuno Fluorescence; FC = Flow Cytometry; FS = Functional Studies; IA = Immuno Assays; IP = Immuno Precipitation; W = Western blot



IF: detection of TCC with HM2167, dilution 20x in PBSA.



IA: HM2167 was used as a capture antibody in different concentrations to detect TCC.

Dilutions to be used depend on detection system applied. It is recommended that users test the reagent and determine their own optimal dilutions. The typical starting working dilution is 1:50.

- FS: Antibody aE11 inhibits platelet activation by antiphospholipid antibody serum. (Ref.5).
- IF: Cryosections of 10 µm were dried, fixed in acetone at 4°C for 10 min, dried and blocked for 20 min with PBSA.
- Positive control: Mucosa from patients with H. Pylori.

General Information

Description

Monoclonal antibody aE11 reacts with a C9 neoantigen of the terminal complement complex (TCC). The three distinct activation pathways of complement converge with the formation of a C5 convertase. The cleavage of C5 by this convertase initiates the lytic or terminal pathway. In contrast to the activation pathways, which require enzymatic cleavage for activation, the terminal pathway relies on conformational changes induced by binding. Binding of C6 facilitates binding of C7 which alters the conformation of the complex. After binding of C8, a variable number of C9 molecules associate with the C5b678 complex, which is also termed the terminal complement complex (TCC). The formation of TCC causes lysis of cells or can trigger a variety of cellular metabolic pathways resulting in the synthesis and release of inflammatory mediators. The TCC contains neoantigens that are absent from the individual native components. C9 neoantigens are present both in the membrane-bound (MAC) and the fluid-phase (SC5b-9) complex. TCC is present in normal human plasma and increased in patients with complement activation.

Aliases

Terminal complement complex, MAC complex, complement membrane attack complex, sC5b-9 complex.

Cross reactivity	Species: Horse: Yes; Non-Human Primate: Yes; Swine: Yes. Proteins: C9: Yes (Ref. 7).
References	1. Mollnes, T et al; Quantification of the terminal complement complex in human plasma by an enzyme-linked immunosorbent assay based on monoclonal antibodies against a neoantigen of the complex. <i>Scand J Immunol</i> 1985, 22: 197 2. Mollnes, T et al; Monoclonal antibodies recognizing a neoantigen of poly(C9) detect the human terminal complement complex in tissue and plasma. <i>Scand J Immunol</i> 1985, 22: 183 3. Pettersen, H et al; Human alveolar macrophages synthesize active complement components C6, C7, and C8 in vitro. <i>Scand J Immunol</i> 1987, 25: 567 4. Berstad, A et al ; Epithelium related deposition of activated complement in <i>Helicobacter pylori</i> associated gastritis. <i>Gut</i> 1997, 40 :196 5. Stewart, M et al. Antiphospholipid antibody-dependent C5b-9 formation. <i>BJH</i> 1997, 96:451 6. Meuwissen, M et al. Colocalisation of intraplaque C reactive protein, complement, oxidised low density lipoprotein, and macrophages in stable and unstable angina and acute myocardial infarction. <i>J Clin Path</i> 2005, 59:126 7. Bayly-Jones, C et al; The neoepitope of the complement C5b-9 Membrane Attack Complex is formed by proximity of adjacent ancillary regions of C9. <i>Commun Biol.</i> 2023, 6(1): 42
Storage&stability	Product should be stored at 4°C. Under recommended storage conditions, product is stable for at least one year.
Precautions	For research use only. Not for use in or on humans or animals or for diagnostics. It is the responsibility of the user to comply with all local/state and federal rules in the use of this product. Hycult Biotech is not responsible for any patent infringements that might result from the use or derivation of this product.

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